

Date: Tue, 9 Aug 94 04:30:25 PDT
From: Ham-Homebrew Mailing List and Newsgroup <ham-homebrew@ucsd.edu>
Errors-To: Ham-Homebrew-Errors@UCSD.Edu
Reply-To: Ham-Homebrew@UCSD.Edu
Precedence: Bulk
Subject: Ham-Homebrew Digest V94 #228
To: Ham-Homebrew

Ham-Homebrew Digest Tue, 9 Aug 94 Volume 94 : Issue 228

Today's Topics:

 another net.success (WAS: xtal application)
 Does anyone have info on QEX?
 E mail address for M. Lee Murrah WD5CID
 Ferrite cores and beads (2 msgs)
 Freq standard from TV Colorburst subcarrier
 Home brew HF transceiver
 How does one make a good, CHEAP, antenna for 2m/70cm???
 New Life For Old FM Rigs
 Phase shifters

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 8 AUG 94 12:35:08
From: pa.dec.com!nntpd.lkg.dec.com!mrnews.mro.dec.com!est.enet.dec.com!
randolph@decwrl.dec.com
Subject: another net.success (WAS: xtal application)
To: ham-homebrew@ucsd.edu

Well, I got my crystal oscillator down to 10 MHz by putting 10uH in series
with the crystal... I can tweek it from about 9.995 to 10.001 MHz now. It'd
probably make a fine VX0, in fact.
Thanks to those who sent suggestions.
-Tom R. N100Q randolph@est.enet.dec.com

Date: 6 Aug 1994 13:24:36 -0700
From: lll-winken.llnl.gov!apple.com!apple.com!not-for-mail@ames.arpa
Subject: Does anyone have info on QEX?
To: ham-homebrew@ucsd.edu

rheiss@harp.aix.calpoly.edu (Robert Everitt Heiss) writes:

>So there were recent articles by Dr. Rhode in both QST and QEX on the
>same subjects? I wonder what QST readers missed.

QST-only readers missed a lot of the meat in this, and many other cases.

Remember the QST article (maybe a year ago) on a home-brew receiver with the *really* robust front-end? Could withstand something like a couple of volts of RF on the input before overloading badly?

Well, the same author wrote a pretty detailed description of a similar, if not the same receiver (schematics and all) in the first (November 1991?) issue of Communications Quarterly!

73,

Kok Chen, AA6TY
Apple Computer, Inc.

kchen@apple.com

Date: Sat, 6 Aug 1994 17:15:52 +0000
From: ihnp4.ucsd.edu!ucsnews!sol.ctr.columbia.edu!howland.reston.ans.net!swrinde!pipex!demon!stevef.demon.co.uk!Stephen@network.ucsd.edu
Subject: E mail address for M. Lee Murrah WD5CID
To: ham-homebrew@ucsd.edu

Does anyone have an E Mail address for Lee Murrah WD5CID. I have some comments on his SuperMorse tutor.

The information I have is over 5 years old and gives a Compuserve ID of 71016,1355 which I have tried to mail to but seems not to exist anymore.

Also a current postal address would be nice so I can mail him his shareware fee.

Thanks in advance.

--

Steve Farthing | stephen@stevef.demon.co.uk |

Melksham "I'm pink therefore I'm Spam"
Wiltshire UK

Date: Thu, 4 Aug 1994 23:32:54 GMT
From: ihnp4.ucsd.edu!usc!nic-nac.CSU.net!charnel.ecst.csuchico.edu!xmission!
u.cc.utah.edu!candy.elen.utah.edu!match@network.ucsd.edu
Subject: Ferrite cores and beads
To: ham-homebrew@ucsd.edu

In article <YEE.94Aug4131058@mipgsun.mipg.upenn.edu> yee@mipg.upenn.edu (Conway Yee) writes:

>From: yee@mipg.upenn.edu (Conway Yee)
>Subject: Ferrite cores and beads
>Date: 04 Aug 1994 17:10:52 GMT

>I am working on a power/swr meter project and am in need of some
>ferrite beads (Amidon FB73-101) and ferrite cores (Amidon T50-3). I
>am unable to find a vendor for these. Newark, Active and Digikey
>don't seem to carry it (at least by Amidon) and I don't know the part
>numbers for other manufacturers.

>--

>Medical Image Processing Group		73 de Conway Yee, N2JWQ
>411 Blockley Hall		EMAIL : yee@mipg.upenn.edu
>423 Guardian Drive		TELEPHONE : 1 (215) 662-6780
>Philadelphia, PA 19104-6021 (USA)		FAX : 1 (215) 898-9145

Buy these directly from Amidon. They'll sell to hams in small quantities.

I don't have their address or phone number handy, but they advertise in the ham magazines.

Polomar Engineers also carries them, or equivalants. They advertise in the ham magazines also.

Marv
KA7TPH

Date: 5 Aug 1994 00:13:12 GMT
From: ihnp4.ucsd.edu!news.cerf.net!gopher.sdsc.edu!news.tc.cornell.edu!
news.cac.psu.edu!howland.reston.ans.net!usenet.ins.cwru.edu!po.cwru.edu!
sct@network.ucsd.edu
Subject: Ferrite cores and beads

To: ham-homebrew@ucsd.edu

In article <YEE.94Aug4131058@mipgsun.mipg.upenn.edu>,
Conway Yee <yee@mipg.upenn.edu> wrote:

> I am working on a power/swr meter project and am in need of some
> ferrite beads (Amidon FB73-101) and ferrite cores (Amidon T50-3).

Amidon does mail order and has no problem with small orders. Their
phone number is 310-763-5770 and FAX is 310-763-2250. The T50-3 is
\$0.65 each and FB73-101s are \$2.00 a dozen. Shipping and handling
is \$4.00 for less than 2 pounds. There is no minimum order.

The T50-3 is an iron powder core. Amidon ferrites all start with "F".

Stephen

--

Stephen Trier "Even if I wanted to practice my horn, it's at
sct@po.cwru.edu the bottom of the bathroom."
KG8IH - Dan Alt, hornist, during the CYWS
 European performance tour 1994

Date: Tue, 9 Aug 1994 07:16:05 GMT
From: ihnp4.ucsd.edu!dog.ee.lbl.gov!agate!howland.reston.ans.net!usc!
elroy.jpl.nasa.gov!llyene!marconi.jpl.nasa.gov!not-for-mail@network.ucsd.edu
Subject: Freq standard from TV Colorburst subcarrier
To: ham-homebrew@ucsd.edu

Greetings!

Does anyone remember an old Radio Electronics or Popular Electronics
article that allowed one to use the colorburst subcarrier of any TV
station for use as a frequency reference. I remember reading that only
network stations (CBS, ABC & NBC) have their colorburst traceable to
NIST, but still it's a good stable source for a reference.

I remember the board used some special chip that took 3.565 (whatever)
the colorburst freq is and put out 60Hz, 100Hz or some similar reference
frequency standard. I believe it had some sort of op-amp that inductively
coupled the colorburst signal out of a nearby TV to this special chip.

Well any leads to parts or even a more recent article about using
TV signals for frequency standards would be appreciated.

Thanks!
- Cliff

Date: 8 Aug 1994 18:26:07 GMT
From: ihnp4.ucsd.edu!dog.ee.lbl.gov!agate!cat.cis.Brown.EDU!noc.near.net!
bigboote.WPI.EDU!duck!jmhill@network.ucsd.edu
Subject: Home brew HF transceiver
To: ham-homebrew@ucsd.edu

Hi;

No doubt RF building blocks do exist, there are a few companies that make such modules, sorry I don't have a list on the top of my head. I've seen a few guys make references to mini-circuits. That's one company that makes plug and play modules, there seems to be oodles of companies that make similar stuff. I've heard that Motorola makes power amplifier modules, but don't know if the parts cover that frequency range. I have seen a few advertisements for such items but have tried none of them myself, sorry. I cannot make any claims since I don't know personally about the stuff.

One thing that you must be careful of is that many manufactured parts are only cost effective if they are manufactured AND sold in large quantities. In other words, in building your radio yourself the final price tag may be far more expensive than a manufactured radio. If you are really not so concerned with price, but feel a need to build something that is unavailable then you may feel more comfortable.

If you possibly can, try to use "standard" parts to save yourself some money. You can benefit from selecting parts that are meant to be used for consumer products, say cellular telephone.....Many parts used to build homebrew gear were meant for other gear. For example some of the transistors used in homebrew ham gear were actually designed for use with consumer grade CB radios.....

Good luck in your endeavors...
Jonathan/N1QOL

Date: 8 Aug 1994 19:45:15 GMT
From: ihnp4.ucsd.edu!agate!howland.reston.ans.net!swrinde!news.uh.edu!
uuneo.neosoft.com!blkbox!guillory@network.ucsd.edu
Subject: How does one make a good, CHEAP, antenna for 2m/70cm???
To: ham-homebrew@ucsd.edu

Justin Bousquet (justin@sequent.com) wrote:
: Hi there, I am not too sure if you guys get a lot of questions like this,
but

: here's a shot.

: I am looking to make my own CHEAP, high gain/low loss 2m/70cm antenna. II'm planning on operating a 5W handheld (all my budget can afford...) and got a lot of coax cable (not sure what it is but I think it is 8240 if that is : correct??) I am only going to need about 5-10 feet from the inside of the house to the outside. I was planning on putting up a dipole along the side of the : house that is always away from the sun. I don't care how long the antenna ends : up being, I just want the BEST possible range...ie high gain & low loss.

I am sure someone will get sick of me mentioning it again but...

The August issue of 73 has very good plan for a 2m/70cm antenna. I built one and it works great for me. It cost about US\$8 to build. It can be made in a base or mobile version. (I built the base version.)

George Guillory, KC5HBT
guillory@blkbox.com

"To stand in silence when they should be protesting
makes cowards of men." Abraham Lincoln

Date: Mon, 8 Aug 1994 14:47:39 GMT
From: amd!amdint.amd.com!txnews.amd.com!bianca!rdavis@decwrl.dec.com
Subject: New Life For Old FM Rigs
To: ham-homebrew@ucsd.edu

In article <gregCu2GK4.JGv@netcom.com>, Greg Bullough <greg@netcom.com> wrote:

>
>It's a shame to retire my Drake UV-3 to packet service, now that virtually
>every local repeater requires PL tones.

>
>So I've been thinking about setting up an outboard sub-audible and DTMF
>encoder. Now the encoder and the DTMF pad are easy to obtain. However,
>most of the encoders seem to want a 5-bit encoding of values from 0-31
>to select the sub-audible tones.

>
>The control circuits seem like a significant challenge. Does anyone
>know of a construction article or a kit for a sub-audible encoder
>with a human interface which is better than a row of dip switches?

>
>Greg

Turn the " control circuits" into software and use a microcontroller.
Rick

WD5EBU

Date: 8 Aug 94 22:41:43 GMT
From: news.acns.nwu.edu!news.eecs.nwu.edu!psuvax1!news.pop.psu.edu!
news.cac.psu.edu!howland.reston.ans.net!cs.utexas.edu!convex!news.duke.edu!
godot.cc.duq.edu!newsfeed.pitt@ihnp4.ucsd.edu
Subject: Phase shifters
To: ham-homebrew@ucsd.edu

Michael@arkas.demon.co.uk (Michael J Dower) writes:

>Who knows of a circuit that will do this?

```
>          [=====]
>          [ Variable ]
>  ----->[ Phase ]----->
>Input signal [ Shifter ]      Output signal with phase P2
>with phase P1 [=====]      linearly dependent upon input
>          I                  phase P1 and control variable C.
>          I
>          I
>          ^
>      Control
>      Variable C, e.g. volts, current, (via digital word value!?! ) etc.
```

>This has to operate at RF, i.e. somewhere above 30 MHz, and preferably
>somewhere in the 60 to 100 MHz range. It would be nice to have a wideband

Merrimac Industries (201) 575-1300 sell both digital and analog
voltage controlled units with a frequency span of up to 1 octave, some
of which are in the range you mention.

Date: 8 AUG 94 12:17:07
From: pa.dec.com!nntpd.lkg.dec.com!mxnews.mro.dec.com!est.enet.dec.com!
randolph@decwrl.dec.com
To: ham-homebrew@ucsd.edu

References <CtyxrA.2LL@sunsrvr6.cci.com>, <btobackCu17oo.LsE@netcom.com>,
<1994Aug5.230601.23378@ttinews.tti.com>t.
Subject : Re: Handbook

In article <1994Aug5.230601.23378@ttinews.tti.com>, sorgatz@avatar.tti.com (Erik
Sorgatz) writes...

>And while we're at it, when-Oh-when are they gonna include some amplifier

>circuits for 6m/220/450 & 1.2 that use MODERN TRANSISTORS?? (A water-cooled
>tube amp for 1.2GHz is an accomplishment alright, but not too useful if you're
>planning to run mobile!

Amen to that.

I'd like to see some moderate-power, transistor amplifiers for 6m/2m/220/440,
suitable for CW/FM (class C). You can find QRP stuff, or legal limit amps, but
anything in between (say, 25-100W out for 1-5W in) is out. There's a couple of
these in older handbooks (I have a '76 with a decent pair of 2m amps in it).

Many, many hams run an HT at home, and could use a project like this. Granted,
such amps may not be a newbie project, but that's what Elmers are for...

-Tom R. N100Q randolph@est.enet.dec.com

End of Ham-Homebrew Digest V94 #228
